

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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Federal Communications Commission
Office of Secretary

In the Matter of)

Advanced Television Systems)
and Their Impact upon the)
Existing Television Broadcast Service)

MM Docket No. 87-268

To: The Commission

DOCKET FILE COPY ORIGINAL

PETITION FOR RECONSIDERATION
Of
NATIONAL PUBLIC RADIO, INC.

Introduction

Pursuant to Section 1.106 of the Commission's Rules, 47 C.F.R. § 1.106, National Public Radio, Inc. ("NPR") hereby petitions for reconsideration of the Fifth Report and Order and Sixth Report and Order in the above-captioned proceeding.¹

NPR is a non-profit, noncommercial membership organization of more than 570 full-service public radio stations. NPR produces and distributes such noncommercial educational radio programming as *All Things Considered*, *Morning Edition*, *Talk of the Nation*, and *Performance Today*. NPR also manages and operates the Public Radio Satellite System ("PRSS").

¹ Advanced Television Systems, Fifth Report and Order, MM Docket No. 87-268, rel. Apr. 21, 1997, 62 Fed. Reg. 26,684 (May 16, 1997) [hereinafter "Fifth Report and Order"]; Advanced Television Systems, Sixth Report and Order, MM Docket No. 87-268, rel. Apr. 21, 1997, 62 Fed. Reg. 26,967 (May 14, 1997) [hereinafter "Sixth Report and Order"].

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I. The Commission Should Reconsider Its Decisions Requiring The Rapid Conversion To Digital Television And Allotting DTV Channels On The Basis Of Current Transmitter Sites And To Replicate Existing Service Areas Because, Taken Together, Those Decisions Are Likely To Cause The Displacement Of A Significant Number Of Noncommercial Educational Radio Station Transmitting Antennas From Their Existing Tower Sites

The Commission should reconsider its two most recent reports and orders in this proceeding because of the harm they will otherwise cause noncommercial educational broadcasting. In the Commission's Fifth Report and Order, it mandated a rapid conversion to digital television broadcasting. Fifth Report and Order at ¶ 76. In its Sixth Report and Order, the Commission allotted DTV channels on the basis of current transmitter sites and to replicate the existing NTSC service areas. Sixth Report and Order at ¶¶ 29-33 & 102. Together, these decisions threaten to produce a shortage of available tower capacity for DTV antennas such that a substantial number of public radio stations will have to relocate their transmitting antennas at significant cost -- both financial and to their signal coverage areas.

In a recently filed Petition for Further Notice of Proposed Rulemaking, the National Association of Broadcasters ("NAB") and the Association for Maximum Service Television ("MSTV") succinctly described the problem:

[C]onversion to DTV will inevitably lead to the displacement of FM antennas from existing TV tower locations. According to the FCC's FM and TV engineering database, there are currently 1,320 FM antennas, or 18% of the total number of FM stations, that are located at the same geographical coordinates as at least one TV antenna. Hundreds if not the majority, of these FM antennas are co-located with TV antennas and, in many instances, will be forced to relocate as a result of the increased weight and load associated with the new DTV equipment. Conversion to DTV will require the installation of new antennas and cable, both of which will increase the load on already overburdened towers. Because towers cannot take on new equipment when they have reached the limits of their load-bearing capacity, some existing broadcast antennas and associated equipment will have to be relocated. Many FM radio stations will likely fall into this category.

Petition For Further Notice Of Proposed Rule Making, MM Docket No. 87-268, at 6 (filed May 30, 1997) (citations omitted).

While the NAB/MSTV engineering analysis does not distinguish between commercial and noncommercial FM radio stations, it is consistent with a survey NPR conducted following the release of the two Reports and Orders. In that survey, approximately one half of the respondent stations lease tower space. Among those stations, approximately two-thirds share tower space with one or more television stations. And, while the digital conversion is only now beginning, several stations have already been informed that they will have to relinquish their tower space to make way for a DTV antenna; many stations either have no lease or have leases that expire within the next 18 months; and a substantial number of stations believe they will suffer a significant reduction in signal coverage area as a result of having to relocate their transmitting antennas. While admittedly preliminary, these survey results signal a significant and unacceptable level of antenna dislocation, additional cost burden, and ultimately, reduction in service to the American people.

While we agree with NAB and MSTV that the Commission's two most recent Reports and Orders are potentially catastrophic for FM broadcasters, we do not believe the matter can or should be left to a future rulemaking proceeding. Rather, it is a direct consequence of the Commission's allotment decision and expedited construction schedule. Accordingly, the harm to FM broadcasters must be addressed through a reconsideration of the decisions that produced that consequence and harm.

NPR supports the relief NAB and MSTV have requested -- namely, appropriate preemption of local land-use restrictions on the construction or modification of antenna towers. See Petition For Further Notice Of Proposed Rule Making at 28-30. In addition, however, NPR proposes that, with regard to any noncommercial educational FM licensee that relocates its transmitting antenna as a result of the DTV conversion, the Commission grandfather the station's existing 60 dBu radiation and signal protection rights so that it does not suffer a permanent loss of service area and operating authority as a result of the Commission's recent decisions in this

proceeding. Such relief is also consistent with the "service replication" principle which the Commission applied in devising its DTV allotment table. See Sixth Report and Order at ¶ 90.

One way in which to implement this grandfathering would be to suspend the 18 month time period during which construction of a new antenna site normally must occur and the license application must be filed once a construction permit is granted. 47 C.F.R. § 73.3598(b). The affected station could then maintain its current operating authority during the DTV transition, while actually operating from the site to which it has been forced to move. Alternatively, the Commission might simply authorize affected stations to operate a single transmitting antenna from alternative sites. Compare 47 C.F.R. § 73.1675.

Once the transition to digital television broadcasting is complete, the replenished supply of tower capacity should permit the grand-fathered FM licensees to move to their prior or another comparable transmitting location. The construction of additional tower capacity, whether or not aided by Federal preemption, may also alleviate some of the adverse consequences of the Commission's two Reports and Orders. However, given the planning and costs associated with a transmitting antenna move, as well as the complexity of land use and tower construction issues, the Commission should assure the radiation and signal protection rights of grand-fathered FM stations for a reasonable period of time, such as five years, after the DTV transition has been completed. In any event, where a station's antenna relocation was the direct consequence of this proceeding, such licensees should be assured the future relocation to their current or another comparable site without having to justify such relocation under the Commission's otherwise applicable standards.

II. The Commission Should Reconsider Its Table Of DTV Allotments To The Extent It Relies on Allotments of DTV Channel 6

As long ago as the Second Further Notice of Proposed Rulemaking in this proceeding, the Commission recognized the need to avoid, to the maximum possible extent, allotments of DTV

channel 6. Advanced Television Systems, Second Further Notice of Proposed Rulemaking, 7 FCC Rcd. 5376, at ¶ 45 (1992). The long and difficult history of adjacent channel interference between NTSC channel 6 and the noncommercial educational FM band more than justified the high threshold the Commission established for any DTV channel 6 allotments. Because the Commission failed to conform to its own standard in its Sixth Report and Order, reconsideration of that decision is warranted.

As an initial matter, while the Commission's Sixth Report and Order did not recount the history of channel 6 adjacent channel interference, that history should be familiar to anyone with even passing association with over-the-air broadcasting.

The channel 6 interference issue has been both vexing to the Commission and the source of contention among radio and television broadcasters and consumer electronics equipment manufacturers. See Changes in the Rules Relating to Noncommercial Educational FM Broadcast Stations, Memorandum Opinion and Order, 58 R.R.2d 629 (1985) [hereinafter “Channel 6 Memorandum Opinion and Order”]. Since 1985, the Commission has maintained stringent rules requiring noncommercial educational FM reserved-band licensees to protect the signal of adjacent channel 6 television licensees. See id. at 630-31; 47 C.F.R. § 73.525.

That has been the case, even though the record in the Channel 6 interference proceeding established that the interference problems were primarily attributable to the inferior performance characteristics of television receivers. And, while the existing channel 6 interference rules have eliminated most instances of interference, that result has not been without a direct and significant cost to noncommercial educational FM radio. Indeed, despite the strong Federal interest in extending public radio service to all, 47 U.S.C. § 396(a), noncommercial educational FM radio in the United States has been severely restrained by the presence of TV channel 6 broadcasters in the spectrum immediately adjacent to the noncommercial FM reserved spectrum.

Reply Comments of National Public Radio, Inc., MM Docket No. 87-268, at 3-4, filed Dec. 23, 1996 (citations omitted) [hereinafter “NPR Reply Comments”]. It was presumably on the basis of this history that the Commission imposed a high threshold for any DTV channel 6 allotments: “the absence of any other readily available allotment opportunity that would meet the minimum spacing requirements.” Advanced Television Systems, Sixth Further Notice of Proposed

Rulemaking, 11 FCC Rcd. 10,968, at ¶ 73 (1996).

Having established this standard, and despite restating it in the Sixth Report and Order, at ¶ 148, it appears the Commission did not adhere to it. Instead, it stated:

We believe that it is important to provide broadcasters with spectrum that is most appropriate and technically suitable for DTV. In this regard, we have developed a Table of DTV Allotments that attempts to provide all eligible broadcasters with a DTV allotment within channels 2-51 without bias against the use of any channel in this band.

Sixth Report and Order, at ¶76 (emphasis added; citation omitted). Since, as well-evidenced in NPR's Reply Comments in this proceeding and as reiterated below, there are significant questions regarding the likelihood of adjacent channel interference to and from DTV channel 6, the indiscriminate allotment of DTV channel 6 cannot be "appropriate and technically suitable for DTV." Id.

Even assuming the Commission intended to adhere to the rigorous standard it established for DTV allotments, there is no indication in the Sixth Report and Order that the standard was applied to the specific DTV channel 6 allotments contained in the allotment table.² Moreover, the Sixth Report and Order failed to demonstrate that the allotment table, as a whole, relies on channel 6 allotments to the minimum extent while achieving its other purported benefits. It may be that an alternative allotment scheme would improve the Commission's allotment proposal, while relying to a lesser extent, if at all, on DTV channel 6 allotments. It is impossible to make that determination, however, because the Sixth Report and Order is completely silent on the matter.

The final DTV channel 6 allotments also appear predicated on the Joint Broadcaster's unsupported belief that several technical factors associated with digital broadcasting and reception would avoid the adjacent channel interference issue. Compare Broadcasters'

² In fact, while the Report and Order states that only two DTV channel 6 allotments were made, Sixth Report and Order at ¶ 151, the DTV Table itself identifies three such allotments. Id., Appendix E, at E-3 (Juneau, Alaska) & E-6 (New Haven,

Comments on the Sixth Notice of Proposed Rulemaking, MM Docket No. 87-268, at 46, filed Nov. 22, 1996) with Sixth Report and Order at ¶ 150 ("[The Joint Broadcasters] indicate that the lower power of DTV transmitters, the improved performance of DTV transmitters with regard to out-of-band emissions, and improved performance capabilities of DTV receivers will reduce the potential for interference between DTV channel 6 and FM radio service.") (emphasis added). As NPR demonstrated in its Reply Comments, not only was adjacent channel interference issue not examined through laboratory or field testing, there are significant reasons to believe that the three factors cited by the Joint Broadcasters will not effectively eliminate adjacent channel interference. NPR Reply Comments at 6-9.

First, the lower power of the proposed DTV stations are initial power levels only. It is inevitable that when the actual signal coverage falls short of theoretical coverage expectations, DTV broadcasters will seek authority for significantly higher power levels to assure optimal service to their over-the-air viewers. Indeed, the Broadcasters concede as much: "To preserve service in the future, as stations gradually ramp up to maximum DTV facilities, the Commission should protect DTV service contours from erosion" Broadcasters' Comments at 5.

Second, even if DTV transmitters generate less out-of-band emissions than do analog television transmitters, the likelihood and severity of the DTV channel 6 interference problems may actually increase. Previously, instances of interference between channel 6 viewers and public radio listeners have generally been associated with high signal fields near the transmitter sites, or the susceptibility to interference of mass-produced receiving sets, rather than out-of-band emissions of the analog television transmitter. That situation could change for the worse, however, when the discrete aural carrier of the analog television channel 6 assigned to 87.7 Mhz is replaced by a wideband, high energy mask across the assigned 6 MHz of DTV channel 6. Rather than eliminating interference problems, the operational characteristics of DTV transmitters may exacerbate them for listeners tuning in noncommercial stations in the reserved FM band starting at 88.1 MHz.

Finally, we agree that the improved DTV reception aspect of new digital TV designs may help address the interference issue since, as the Commission has previously recognized, channel 6 interference is largely attributable to television set design inadequacies. We also agree that digital coding techniques generally provide some increase in immunity from adjacent channel interference. Nonetheless, the actual success of such coding techniques is speculative since NPR also understands that they were never part of the testing done by DTV proponents during the standards setting process. Moreover, given the intransigence of consumer electronics manufacturers on the matter of interference immunity standards, and the

Commission's unwillingness to require such standards, the belief that DTV set design improvements will ameliorate the channel 6 interference issue is highly speculative.

NPR Reply Comments at 7-9 (citations omitted). Because of these substantial issues, the Commission simply cannot assume that adjacent channel interference will not result. Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402 (1971).

The Commission should also reconsider its decision to permit television broadcasters to switch their DTV service to their current NTSC channels at the end of the transition. Sixth Report and Order, at ¶ 84. This option is predicated on the former NTSC channel being included in the final DTV core spectrum, id., which, in turn, assumes that the channel is appropriate for DTV use. It is inappropriate at this time to permit such an option, however, because there may not have been sufficient field testing or practical experience at the conclusion of the transition to determine the appropriateness of digital broadcasting on NTSC channel 6. Thus, the operation of the three DTV channel 6 allottees during the transition may not produce harmful adjacent channel interference, but the return of fifty or more television broadcasters to their former NTSC channel 6 allotment may result in significant adjacent channel interference in communities across the country. See Sixth Report and Order, Attachment B. Until there is adequate field testing or practical experience, therefore, the Commission should not accord current TV channel 6 incumbents the option of returning to their current NTSC channels at the end of the transition.

Finally, while recognizing that the nature and extent of adjacent channel interference has yet to be determined, see Sixth Report and Order at ¶ 83, "[the Commission] proposed to apply an appropriate standard similar to that currently specified in the rules to protect against interference between NTSC Channel 6 and FM radio." Sixth Report and Order at ¶ 148; Sixth Further Notice of Proposed Rulemaking, MM Docket No. 87-268, at ¶ 73 (rel. Aug. 14, 1996). As an initial matter, the Sixth Report and Order fails to set forth the adjacent channel interference

standard the Commission concluded to be appropriate. See Sixth Report and Order, at ¶ 151.

Given the uncertainties associated with digital broadcasting and reception, moreover, it would not be appropriate simply to rely on the existing rules.

First, the Commission must recognize the specific context and narrow scope of the existing TV channel 6 rules. The long and arduous process that led to those rules specifically addressed the adjacent channel interference issues at a time of analog television broadcasting and relatively unsophisticated television reception equipment. See Channel 6 Memorandum Opinion and Order, 58 R.R.2d at 629-31. For that reason, the rules were expressly intended to be an interim solution. Id. at 630. As written, moreover, Section 73.525 only applies to (1) an existing noncommercial FM station that is proposing certain changes described in Subsection 73.525(b)(i)-(ii) or (2) the construction of a new noncommercial FM station. Given the context in which the rules were written, and their temporary purpose, such stations should only be required to avoid predicted interference to the signal of an adjacent analog television channel 6. 47 C.F.R. §§ 73.525(c)-(d).

Second, at least in those instances where the existing rules, by their terms, do not apply, the Commission should apply its long-standing "newcomer" policy³ as well as require the newcomer to accept or remedy any interference it receives from an incumbent broadcaster. Such regulatory treatment is particularly warranted here in order to further the Federal mandate to extend the service of noncommercial educational radio to as much of the American public as possible. 47 U.S.C. § 396(a). Therefore, at least in the case of (1) an existing noncommercial FM station that has not proposed changes referenced in Section 73.525(b)(i)-(ii) or (2) an existing or new noncommercial educational FM station that either experiences or causes adjacent

³ As set forth in NPR's Reply Comments in this proceeding, "[f]ive decades of Commission precedent has required the 'newcomer' to be responsible for resolving interference caused to an incumbent broadcaster." NPR Reply Comments at 10 (citing Midnight Sun Broadcasting Co., 11 FCC 1119 (1947); Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act - Competitive Bidding, 10 FCC Rcd. 13821, at ¶ 41 (1995) (interference between co-equal services); In re Resolution of Interference between UHF channels 14 and 69 and Adjacent-

channel interference of a new type, degree, or effect or that is associated with the operation of a DTV channel 6 station, the DTV channel 6 allottee should be responsible for any adjacent channel interference.

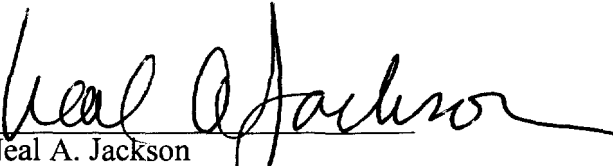
Finally, if, as the Commission apparently hopes, adjacent channel interference does not result from the operation of DTV channel 6 allottees, there is no need even to apply the existing rules. Indeed, there can be no justification for any noncommercial educational FM station to bear the potentially substantial costs and burdens of compliance with Section 73.525 if, in fact, adjacent channel interference will not occur in any event.

Conclusion

For the foregoing reasons and in the foregoing respects, NPR respectfully requests reconsideration of the Commission's Fifth Report and Order and Sixth Report and Order.

Respectfully submitted,

NATIONAL PUBLIC RADIO, INC.



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CERTIFICATE OF SERVICE

I, Muriel Dodd, hereby certify that a copy of the foregoing Petition for Reconsideration of National Public Radio, Inc. was sent this 13th day of June, 1997, by first class mail, postage prepaid to the following:

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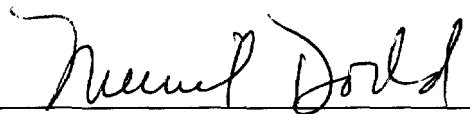
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